U.S. Information Services Industry

INPUT

Topics

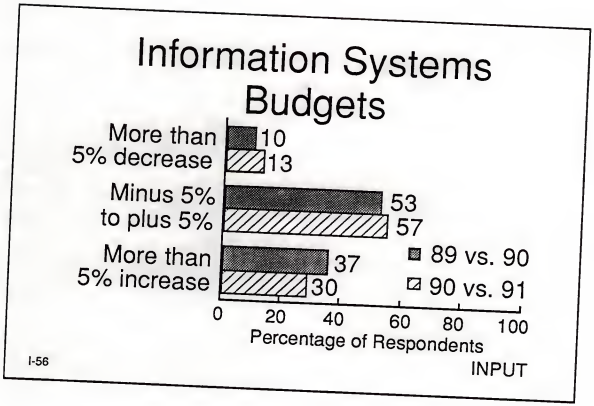
- Economic impacts
- Technology trends
- U.S. information services industry

MS-16

INPUT

Notes

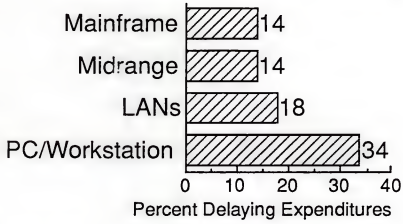
3/7/91



Notes

3/7/91

1991 Economic Impacts on Hardware Spending



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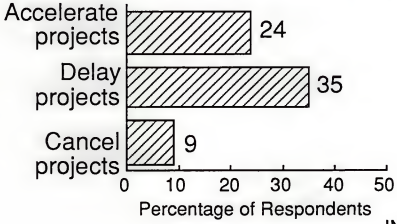
I-65

Notes

3/5/91

Recessionary Impacts on Application Development



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I-67

Notes

1/14/91

Information Technology Implementation Trends

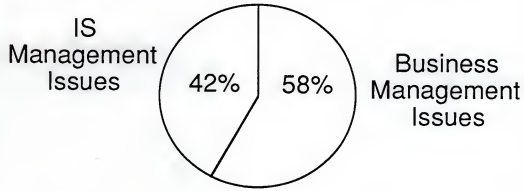
I-80

INPUT

Notes

2/7/91

Technology Implementation IS vs. Business Inhibitors



I-85

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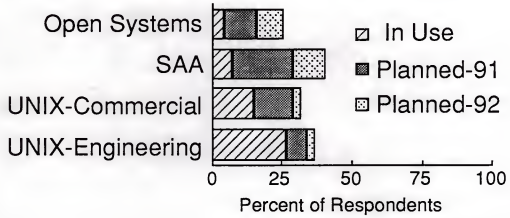
Notes

3/1/91

Technology Status and Timing Operating Systems/Architecture



I-88

INPUT

Notes

3/1/91

Major Vendors UNIX Commitment

	Before 1990	After 1990
NCR	High	Full
DEC	Low	High
Computer Assoc.	Low	High

SP-130

INPUT

Notes

3/7/91

Major Vendors UNIX Commitment

	Before 1990	After 1990
Microsoft	Low	Medium
Unisys	Low	Medium

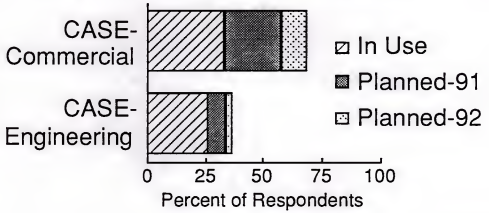
INPUT

SP-131

Notes

3/7/91

Technology Status and Timing Application Development



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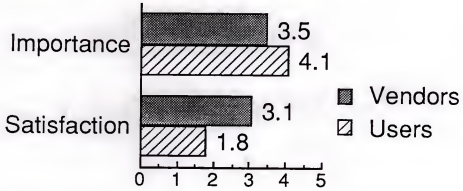
I-90

Notes

3/1/91

Case Standards



AD-58

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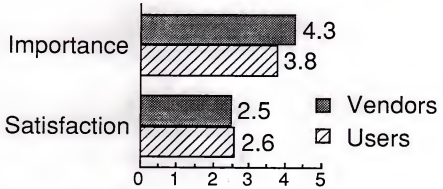
Notes

3/7/91

Re-engineering



AD-59

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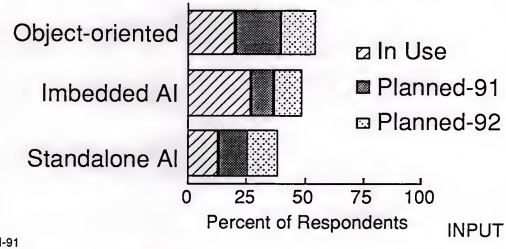
Notes

3/7/91

Technology Status and Timing Application Development



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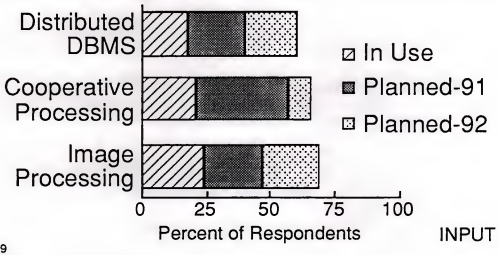
I-91

Notes

3/1/91

Technology Status and Timing Operating Systems/Architecture



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I-89

Notes

3/1/91

SI Electronic Image Justification

Reason	Rank
Improved customer service	1
Improved records management	2
Personnel savings	3
Media storage savings	4
Space savings	5

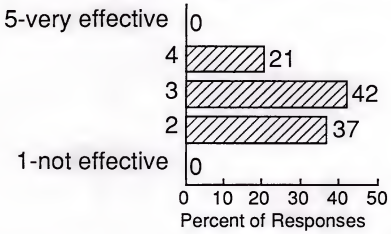
INPUT

SI-115

Notes

1/21/91

Effectiveness of Image Processing Systems



I-105

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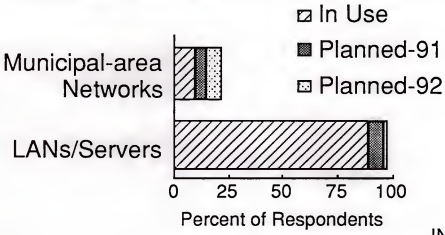
Notes

2/7/91

Technology Status and Timing Networks/Communications



I-92

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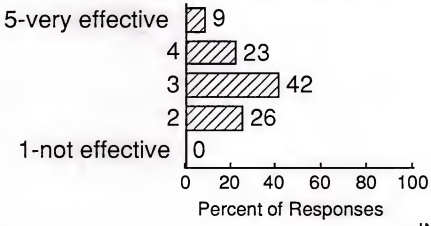
Notes

3/1/91

Effectiveness of LAN Interconnections



I-98

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Notes

2/7/91

Systems Downsizing

- 52% implementing downsizing
- 20% planning or considering

I-66a

INPUT

Notes

3/1/91

U.S. Information Services Market 1990-1995

MS-17

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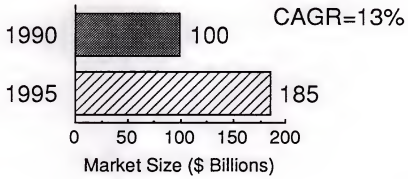
Notes

3/7/91

U.S. Information Services Market, 1990-1995



MF-3

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Notes

3/5/91

Systems Management

- Market of the 1990s
- Evolution and revolution
- Offerings to become mix of
  - Information technology
  - Professional expertise
  - Business execution

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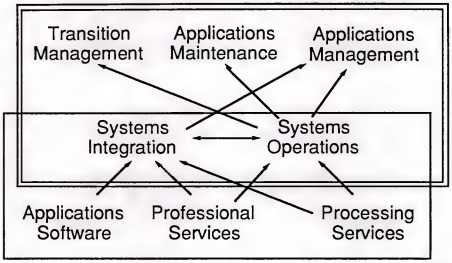
IS-36

Notes

3/7/91

Systems Management Opportunities



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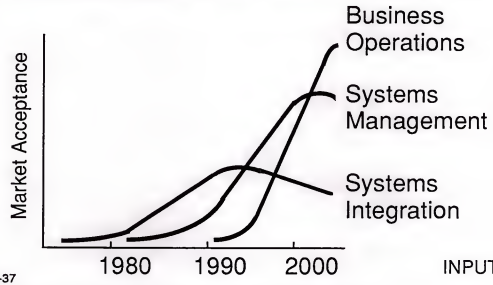
OU-21

Notes

12/13/90

Outsourcing Market Waves



IS-37

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Notes

3/7/91

Business Operations Market

- Potential market 2 to 5 times information systems expenditures
- Contractors will show reduction in overall costs of 25% or more

IS-38

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Notes

3/7/91

Business Operations Examples

- Insurance claims processing
- Telephone company yellow pages operation
- Credit card operations
- Coupon processing for retailers
- Fulfillment for direct marketing

INPUT

IS-39

Notes

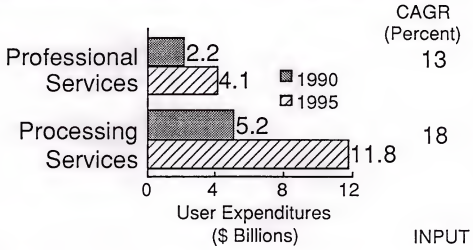
Systems Operations (SO)

INPUT

SO- 1

Notes

U.S. Systems Operations Market Forecast, 1990-1995

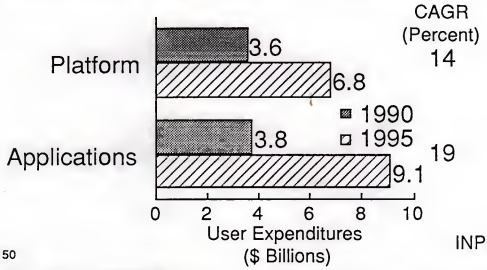


SO- 20

Notes

3/8/91

U.S. Systems Operations Market Forecast, 1990-1995



S0-150

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Notes

3/8/91

Leading U.S. SO Vendors

Vendor	Market Share (Percent)
Electronic Data Systems	16
Computer Sciences Corp.	5
Systematics	3

INPUT

SO- 25

Notes

3/8/91

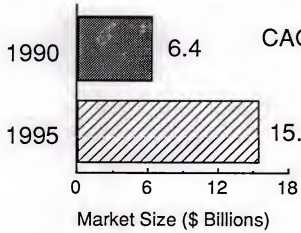
Systems Integration

SI-1

INPUT

Notes

U.S. Systems Integration Market 1990-1995



SI-8

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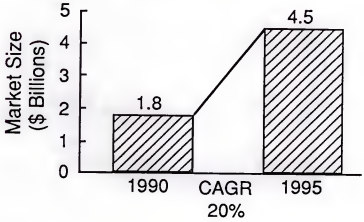
Notes

2/20/91

Network Integration Market 1990-1995



SI-15

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Notes

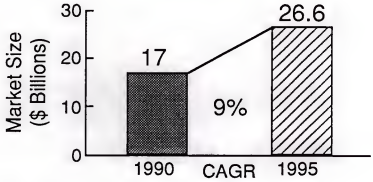
Processing Services

PC-1

INPUT

Notes

U.S. Processing Services Market*, 1990-1995



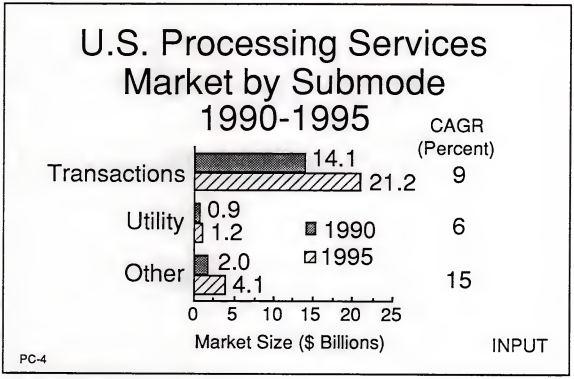
*Without Systems Operations

INPUT

PC-3

Notes

3/4/91



Notes

3/4/91

Processing Services Driving Forces

- Concentration in core business
- Emphasis on productivity
- Vendor consolidation
- Lower-risk alternatives
- Staying with proven vendors

INPUT

PC-13

Notes

3/4/91

Processing Services Inhibitors

- Economy—short-term
- Micro/mini/WS solutions
- Price/performance disadvantage
- Market entry costs
- Market maturity

INPUT

PC-7

Notes

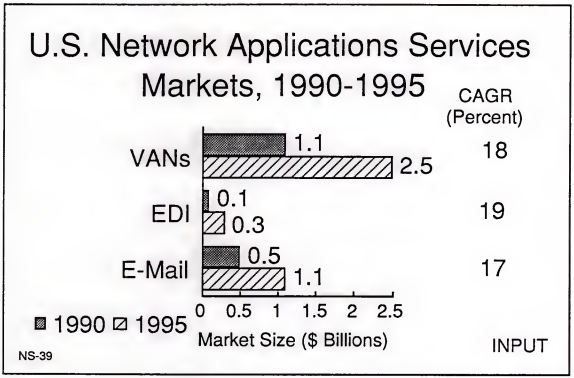
3/4/91

Network Services

INPUT

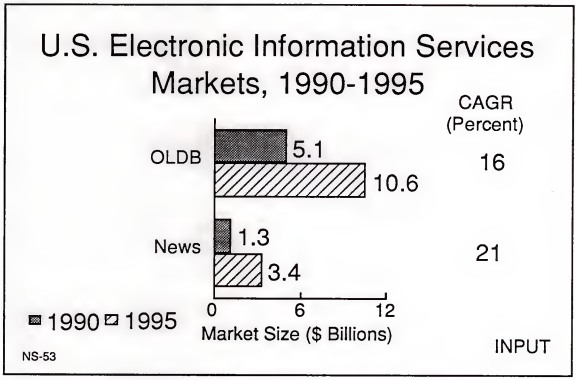
NS-1

Notes



Notes

3/4/91



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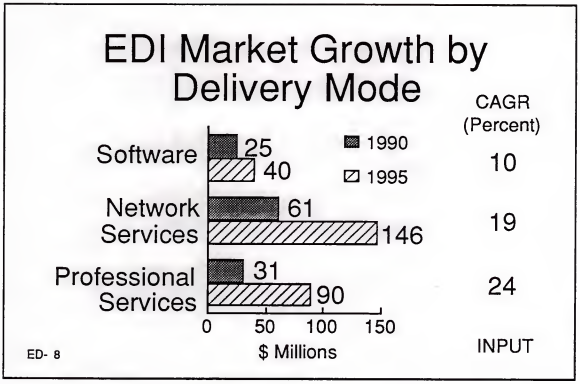
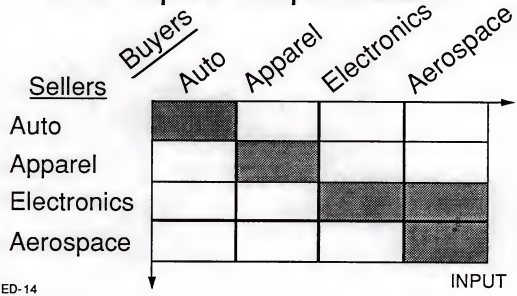
3/4/91



Notes

EDI Input-Output Matrix

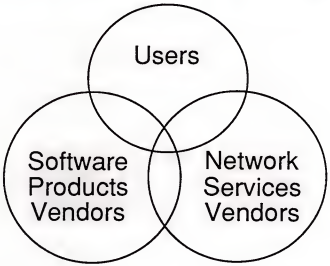


ED-14

Notes

2/13/91

EDI Players Overlap



ED-13

INPUT

Notes

2/13/91

The Network Will Become the System

- Implications for users
  - Nodes are almost equal in power
  - Telecommunications skills are vital
  - IS management at many nodes
  - More complex systems design

INPUT

NS-13

Notes

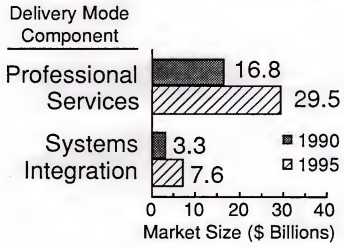
Professional Services

INPUT

PF-1

Notes

U.S. Professional Services Market Aggregates, 1990-1995



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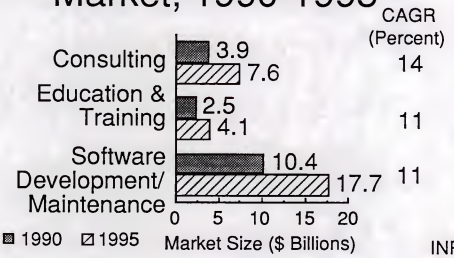
PF-13a

Notes

2/4/91

U.S. Professional Services Market, 1990-1995



PF-12

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Notes

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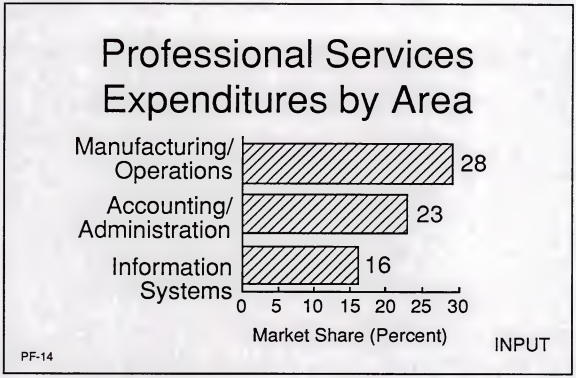
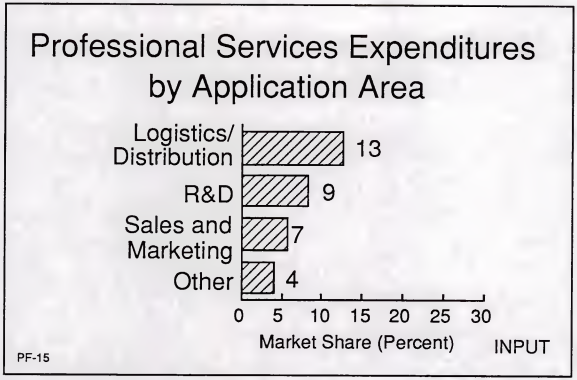


Notes

2/4/91



Notes

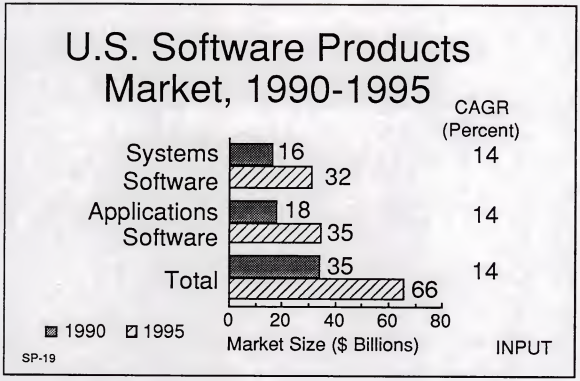
2/4/91

Software Products

SP-1

INPUT

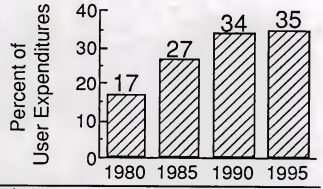
Notes



Notes

3/5/91

Software Products Portion of Information Services, 1980-1995



$ Billions	1980	1985	1990	1995
Software Products	2.9	13.3	34.2	66.2
Total Information Services	17.0	48.6	100.6	187.8

INPUT

SP-18

Notes

2/4/91

Software Products Major Trends

- Downsizing—gathering speed
- Graphical user interfaces—windows
- Network integration—interoperability
- UNIX—major vendor momentum
- Reengineering—new focus for CASE

SP-132

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Notes

3/7/91

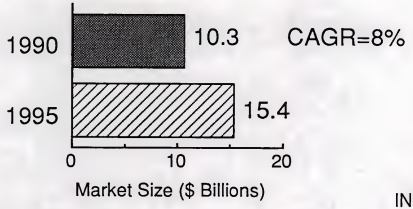
Turnkey Systems/VARs

INPUT

TS-1

Notes

U.S. Turnkey Systems Market, 1990-1995



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TS-10

Notes

2/4/91

Turnkey Systems Market Reduced Size

- Major vendors shifting to software
  - Interleaf
  - Metaphor

INPUT

TS-30a

Notes

3/1/91

Turnkey Systems Market Reduced Size

- Hardware sold direct
  - IBM
  - DEC
- Downsizing of hardware sold

TS-30b

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Notes

Vendor Direction

CT-35

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Notes

3/7/91

Vendor Direction—EDS

- Services based on technology and execution
  - Systems operations
  - Systems integration
  - Business operation
- Vertical focus—large companies

CT-36

INPUT

Notes

3-7/91

Vendor Directions
Computer Associates

- Slowdown in acquisitions
- CA90s—framework for development
- Major emphasis on UNIX

CT-37

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Notes

3/7/91

Vendor Directions
Microsoft

- Windows vs. OS/2
- Attention to UNIX
- Alliances beyond IBM
- Focus on LANs
- Professional services offerings

CT-38

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Notes

3/7/91

Vendor Directions
Andersen Consulting

- Services based on technology
  - Systems integration
  - Application management
  - Systems operations
- Software focus—CASE plus applications

CT-39

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Notes

3/7/91

Conclusions

MS-18

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Notes

3/7/91

Impact of Economic Slowdown
(Short-Term)

	Change in Growth Rate
Professional Services	↓
Systems Integration	↓
Systems Operations	↑

INPUT

MF-14

Notes

2/4/91

Impact of Economic Slowdown
(Short-Term)

	Change in Growth Rate
Processing Services	—
Network Services	—
Software Products	↓
Turnkey Systems	↓

INPUT

MF-13

Notes

2/4/91

U.S. IS Industry Conclusions

- Slower growth in near term
- Shift to broad-based services zones
- Large services vendors grow fastest
- Software products—turmoil continues

IS-40

INPUT

Notes

U.S. Information Services Industry

March ~~12, 1991~~

INPUT

Need slide also

1

1

Topics

- Economic impacts
- Technology trends
- U.S. information services industry

MS-16

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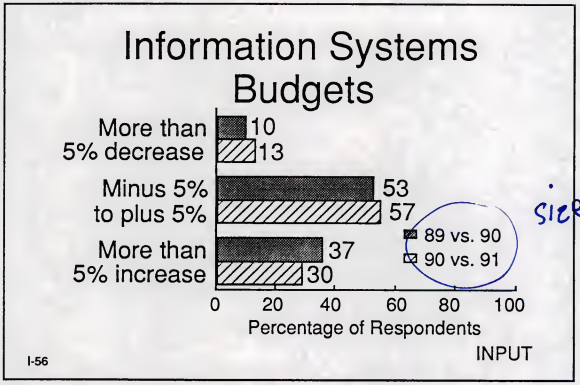
Notes



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Notes

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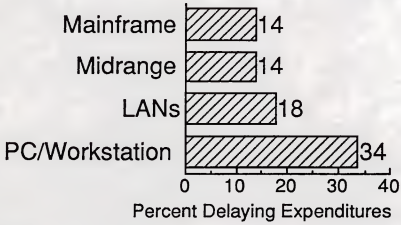
1/14/91

3

1991 Economic Impacts on Hardware Spending



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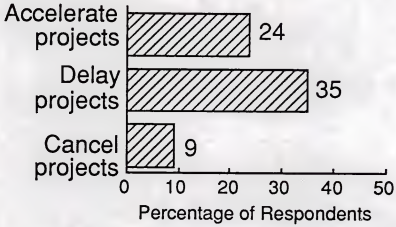
Notes

3/91

4

Recessionary Impacts on Application Development



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I-67

Notes

1/14/91

5

Information Technology Implementation Trends

I-80

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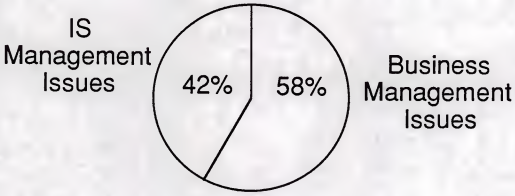
Notes

2/7/91

(6)

Technology Implementation IS vs. Business Inhibitors



I-85

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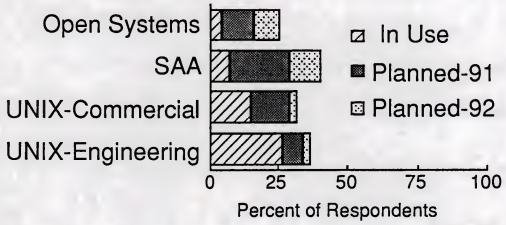
Notes

3/1/91

1

Technology Status and Timing Operating Systems/Architecture



I-88

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Notes

Major Vendors UNIX Commitment

	Before 1990	After 1990
NCR	High	Full
DEC	Low	High
Computer Assoc.	Low	High

INPUT

SP-~~131a~~ 130

Notes

Major Vendors UNIX Commitment

	Before 1990	After 1990
Microsoft	Low	Medium
Unisys	Low	Medium

SP-~~1316~~ 131

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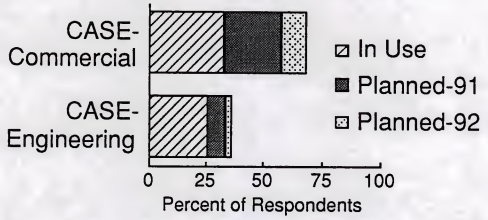
Notes

3/7/91

10

Technology Status and Timing Application Development



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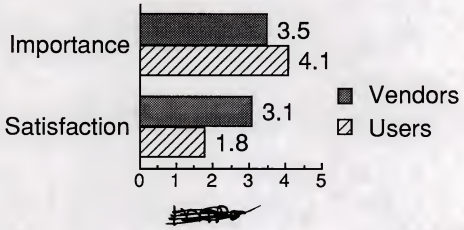
I-90

Notes

Case Standards



AD-58

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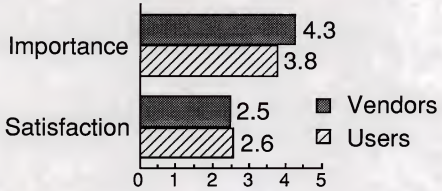
Notes

3/7/91

12

Re-engineering

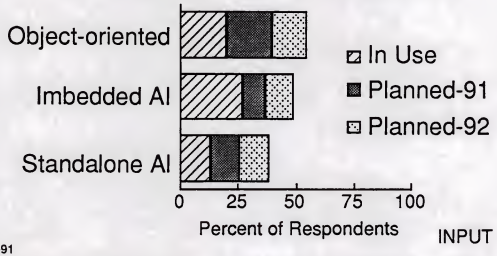


AD-59

INPUT

Notes

Technology Status and Timing Application Development



INPUT

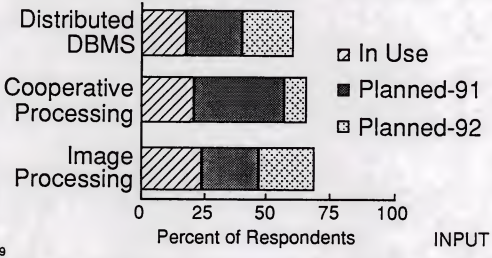
I-91

Notes

3/1/91

14

Technology Status and Timing Operating Systems/Architecture



INPUT

I-89

Notes

Image Justification Factor

Reason	Rank
Improved customer service	1
Improved records management	2
Personnel savings	3
Media storage savings	4
Space savings	5

IP-11

INPUT

Notes

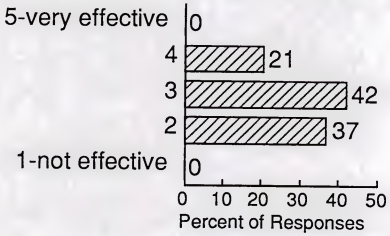
SI Electronic Image Justification

like SI-115

12/14/90

16

Effectiveness of Image Processing Systems



I-105

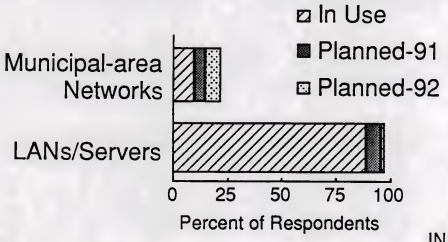
INPUT

Notes

2/7/91

17

Technology Status and Timing Networks/Communications

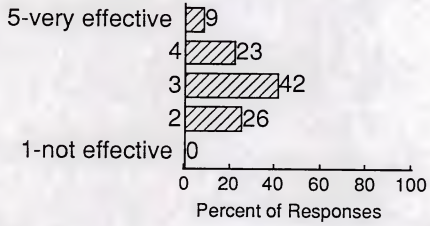


I-92

INPUT

Notes

Effectiveness of LAN Interconnections



I-98

INPUT

Notes

2/7/91

19

Systems Downsizing

- 52% implementing downsizing
- 20% planning or considering

I-66a

INPUT

Notes

U.S. Information Services Market 1990-1995

MS-17

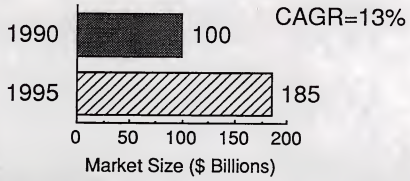
INPUT

Notes

3/91

21

U.S. Information Services Market, 1990-1995



MF-3

INPUT

Notes

3/5/91

22

Systems Management

~~Market for the~~

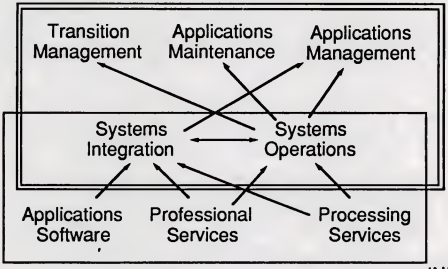
- Market of the 1990s
- Evolution and Revolution
- Offerings to become mix of
  - Information Technology
  - Professional Expertise
  - Business ~~Operations~~ Execution

IS - ~~39~~ 36

23

21

Systems Management Opportunities



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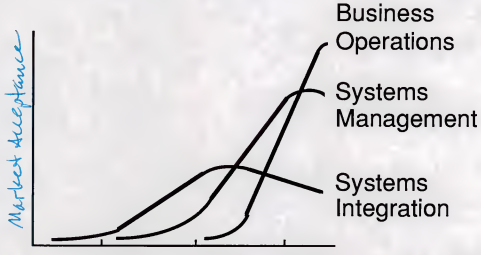
OU-21

Notes

Outsourcing Market Waves



INPUT

IS-~~37~~ ~~36~~

37

Notes

3/7/91

25

Business Operations Market

- Potential market 2 to 5 times information systems expenditures
- Contractors will show reduction in overall costs of 25% or more

INPUT

IS-~~40~~ ~~39~~
38

Notes

26

3/7/91

25

Business Operations Examples

- Insurance claims processing
- Telephone company yellow pages operation
- Credit card operations
- Coupon processing for retailers
- Fulfillment for direct marketing

INPUT

IS-~~41~~ ~~38~~

39

Notes

27

3/7/91

29 SO -1

30 SO - 150

29 SO - 20

~~SO~~

31 SO - 25

Systems Integration

SI- 1

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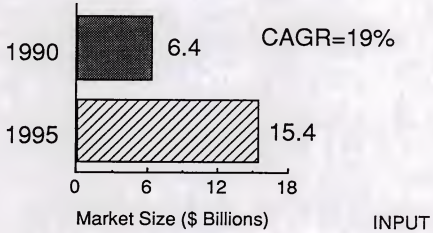
Notes

32

U.S. Systems Integration Market 1990-1995



SI-8

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Notes

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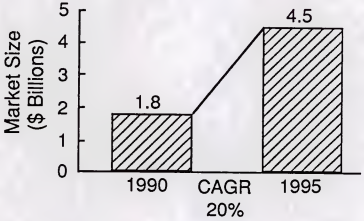
B3

Network Integration Market 1990-1995



SI-15

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Notes

134

Processing Services

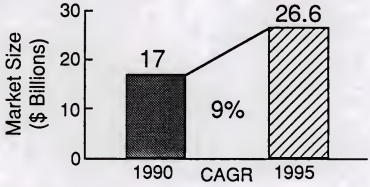
PC-1

INPUT

Notes

35

U.S. Processing Services Market*, 1990-1995

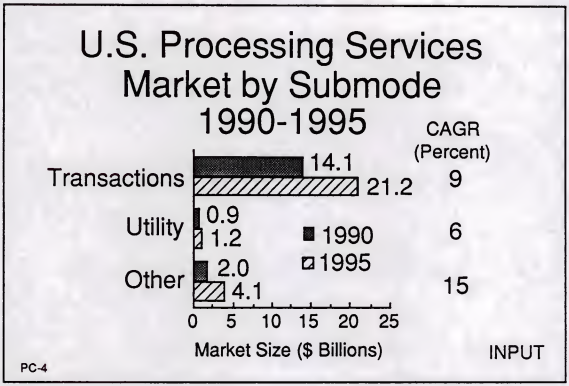


*Without Systems Operations

INPUT

PC-3

Notes



Notes

Processing Services Driving Forces

- Concentration in core business
- Emphasis on productivity
- Vendor consolidation
- Lower-risk alternatives
- Staying with proven vendors

INPUT

PC-13

Notes

Processing Services Inhibitors

- Economy—short-term
- Micro/mini/WS solutions
- Price/performance disadvantage
- Market entry costs
- Market maturity

INPUT

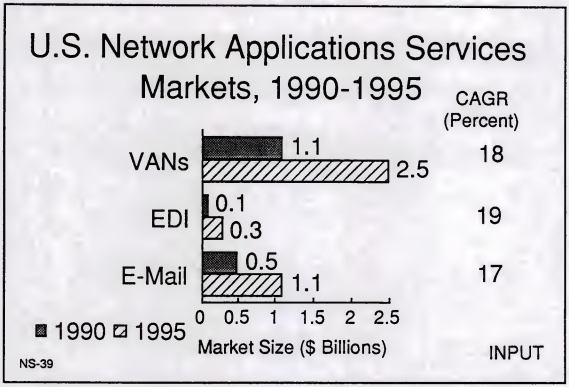
PC-7

Notes

Network Services

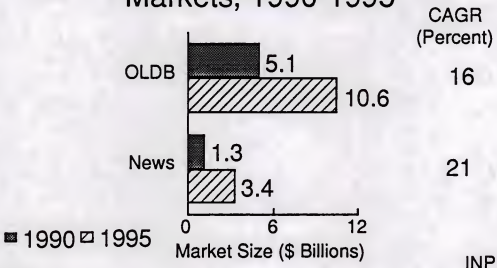
INPUT
MPRE-127

Notes



Notes

U.S. Electronic Information Services Markets, 1990-1995



INPUT

NS-53

Notes

ED1

43 ED-8

44 ED-14

45 ED-13

The Network Will Become the System

- Implications for users
  - Nodes are almost equal in power
  - Telecommunications skills are vital
  - IS management at many nodes
  - More complex systems design

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MPRE-377

Notes

46

Professional Services

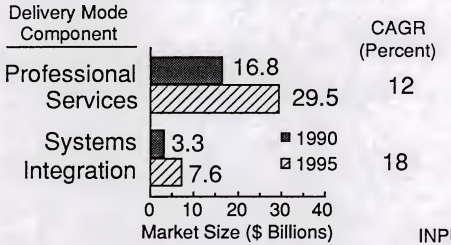
INPUT

PF-1

Notes

47

U.S. Professional Services Market Aggregates, 1990-1995



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PF-13a

Notes

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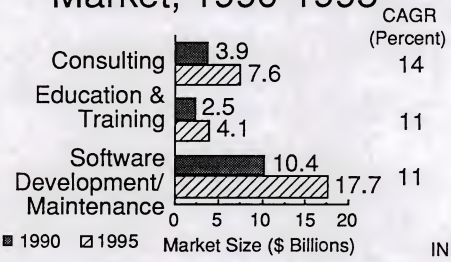
48

U.S. Professional Services Market, 1990-1995



PF-12

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Notes

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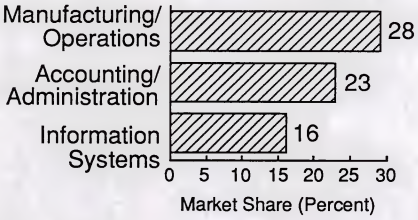
49

Professional Services Expenditures by Area



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PF-14

Notes

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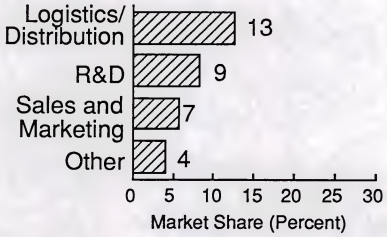
50

Professional Services Expenditures by Application Area



INPUT

PF-15

Notes

2/4/91

51

need new stuff
- Downsizing
- Networking
- GUIs
- Microsoft Windows

Software Products

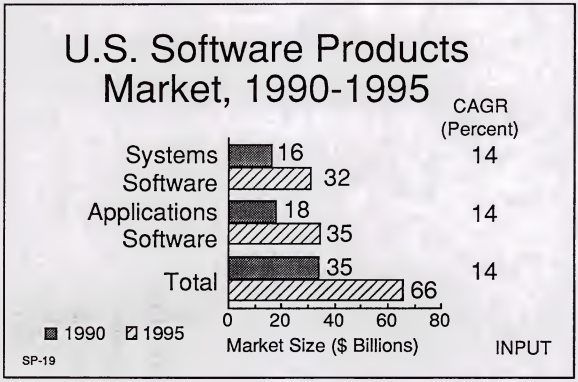
In each area
Hot chart
issue.
Vendor chart (not share but
what they are doing)

INPUT
MPRE-407

What's happening!

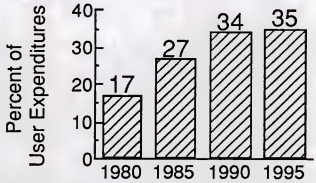
Notes

52



Notes

Software Products Portion of Information Services, 1980-1995



$ Billions	1980	1985	1990	1995
Software Products	2.9	13.3	34.2	66.2
Total Information Services	17.0	48.6	100.6	187.8

INPUT

SP-18

Notes

2/91

154

Software Products Major Trends

- Downsizing—gathering speed
- Graphical user interfaces—windows
- Network integration—interoperability
- UNIX—major vendor momentum
- Reengineering—new focus for CASE

INPUT

SP-185 132

Notes

TS

56 TS-1

57 TS-10

58 30a

59 30b

Vendos deviacion

60

CT -35

(CD)

(1

Vendor Direction

EDS

~~o Systems Integration plus Systems Operations~~

- Services ~~[illegible]~~ based on technology and ~~people~~ execution
  - Systems Operations
  - Systems Integration
  - Business Operations
- Vertical focus - large companies

CT - 36

61

Vendor Direction
Computer Associates

- Slowdown in acquisitions
- CA90s - framework for development
- Major emphasis on UNIX

CT-37

62

Vendor Directions

Microsoft

- Windows vs OS/2
- Attention to UNIX
- Professional Services Offerings
- Alliances beyond IBM
- Focus on LANs

CT-38

63

Vendor Direction

Andersen Consulting

- Services based on Technology
  - System Integration
  - Application Management
  - System Operation
- Software Focus - CASE plus Application

CT-39

.64

Conclusions

MS-18

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Notes

65

3/7/91

Impact of Economic Slowdown
(Short-Term)

	Change in Growth Rate
Professional Services	↓
Systems Integration	↓
Systems Operations	↑

INPUT

MF-14

Notes

66

2/4/91

Impact of Economic Slowdown
(Short-Term)

	Change in Growth Rate
Processing Services	—
Network Services	—
Software Products	↓
Turnkey Systems	↓

INPUT

MF-13

Notes

67

2/4/91

U. S. IS Industry

Conclusions

- Slower growth in nineties
- Shift to broad band services grows
- ~~Big vendors grow~~
- Large Service Vendors grow fastest
- Software Products - ~~shifting markets~~ turmoil continues

15-40

68

p8

12